PCT

WORLD INTELLECTUAL PROPERTY ORGANIZATION International Bureau



INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(51) International Patent Classification 6: H01L 27/00, 51/20

A1

(11) International Publication Number:

WO 99/54936

(43) International Publication Date:

28 October 1999 (28.10.99)

(21) International Application Number:

PCT/GB99/01176

(22) International Filing Date:

16 April 1999 (16.04.99)

(30) Priority Data:

9808061.7

16 April 1998 (16.04.98)

GB

(71) Applicant (for all designated States except US): CAMBRIDGE DISPLAY TECHNOLOGY LTD. [GB/GB]; 181a Huntingdon Road, Cambridge CB3 0DJ (GB).

(72) Inventors; and

- (75) Inventors/Applicants (for US only): TESSLER, Nir [IL/GB]; 6
 Teversham Way, Sawston, Cambridge CB2 4DF (GB),
 SIRRINGHAUS, Henning [DE/GB]; 33 Beaulands Close,
 Cambridge, CB4 1JA (GB), FRIEND, Richard, Henry
 [GB/GB]; 37 Barton Road, Cambridge CB3 9LG (GB).
- (74) Agents: SLINGSBY, Philip, Roy et al.; Page White & Farrer, 54 Doughty Street, London WC1N 2LS (GB).

(81) Designated States: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, HR, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, ARIPO patent (GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG).

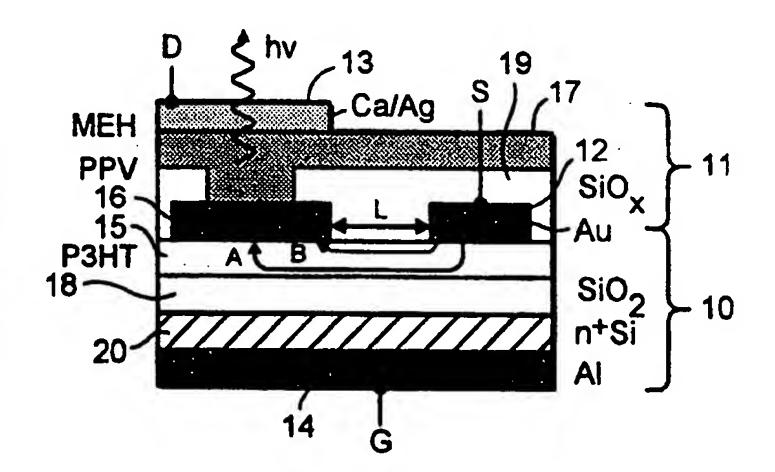
Published

With international search report.

(54) Title: POLYMER DEVICES

(57) Abstract

An integrated circuit device comprising: a current drive switching element having an input electrode, an output electrode, a switchable region comprising a semiconductive polymer material electrically coupled between the input electrode and the output electrode, and a control electrode electrically coupled to the switchable region so as to allow the application of a bias to the control electrode to vary the flow of current through the switchable region between the input electrode and the output electrode; and a second circuit element, integrated with the switching element, and electrically coupled with the input electrode of the switching element for receiving a drive current from the switching element.



REST AVAILABLE COPY